

REMARKS

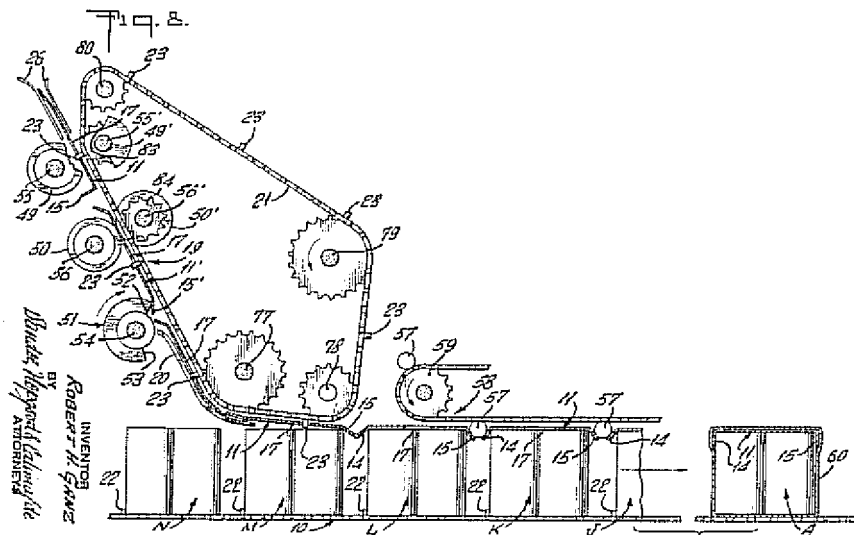
This response follows the Notice of Appeal and Pre-appeal Request for Review, and is filed along with a timely Request for Continued Examination. Upon considering the foregoing amendments in connection with the following remarks, it is believed the Examiner will agree that all pending claims recite patentable subject matter and thus should be allowed.

In the final Office Action to which this document is responsive in light of the RCE, the Examiner contended that U.S. Patent No. 3,745,892 to Ganz disclosed the inventions of claims 1, 2, 5, and 106. In order for these rejections to be proper, Ganz must expressly or inherently disclose the exact same inventions, arranged precisely as required in these claims. *See Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (“The identical invention must be shown in as complete detail as is contained in the...claim.”). Moreover, it is axiomatic that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The possibility, or even probability, that the claimed structural arrangement exists in a reference is inadequate to meet the “strict identity” requirement for a proper anticipation rejection. *See Continental Can Company USA v. Monsanto Company*, 948 F.2d 1264, 20 USPQ2d 1746 (Fed. Cir. 1991) (holding anticipation “may not be established by probabilities or possibilities”).

Claim 1, in pertinent part, requires an overhead lug conveyor for conveying the carton in a first direction along the path in a substantially horizontal plane, and a takeaway conveyor with an upstanding lug for conveying the carton along the path in the substantially horizontal plane in a second direction “generally perpendicular” to the first direction. Claim 2 further requires that the lugs are pivotally mounted to a conveyor chain.

Ganz discloses a first conveyor 10 conveying “clusters” of articles, and a second conveyor 21 that conveys blanks 15 for placement “on the tops of the moving clusters” (col. 3, lines 3-4). As can be readily understood from Figure 8, the respective conveying

directions of these conveyors are certainly not “generally perpendicular” to each other:



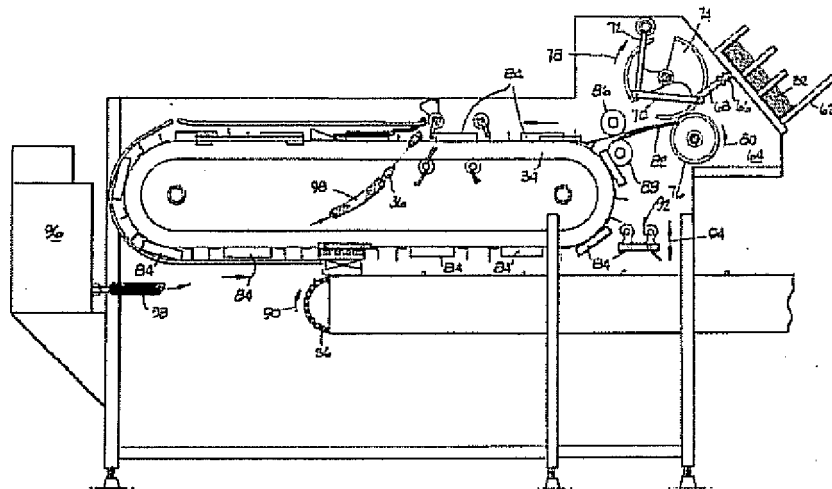
The Examiner contends that this reference meets the terms of claim 1 because “lugs 22” are “conveyed in an upstanding position generally perpendicular to conveyor 21.”

Respectfully, this is **not** what claim 1 requires. Rather, it requires that the lug of the takeaway conveyor is “selectively movable to a position for engaging and conveying the carton in a second direction along the path,” and that this *second direction* in which the carton is moved is *perpendicular* to the first direction of conveyance of the overhead conveyor.

Moreover, even if it is presumed for the sake of argument that the perpendicularity requirement of claim 1 is met, the lugs 22 of the conveyor 10 do not “engage” anything conveyed by the overhead conveyor, as required in claim 1, but rather engage a different structure altogether: namely, the “clusters” (which actually prevent the lugs 22 from engaging the blanks 15). There is also no evidence at all that the lugs 22 or 23 are pivotally mounted

to any chain, as required by claim 2 (and the Examiner's contention that these lugs "move from a depending/engaging position to a retracted/return position" cannot be sustained as meeting this requirement). Finally, the conveyors in Ganz do not convey any articles at right angles in the same substantially horizontal plane. Accordingly, the Ganz reference does not disclose the "exact same invention" of claims 1 and 2, so the anticipation rejections cannot be sustained.

U.S. Patent No. 4,460,349 to Charron is also relied upon in the final Office Action as disclosing the exact same invention of claims 1 and 2. Charron discloses a conveyor with "mandrels" 84 that the Examiner contends qualify as lugs, along with a takeaway conveyor 56:



Claim 1 requires that the lug of the overhead conveyor is "selectively movable to a **depending position for engaging and conveying the carton in a first direction** along the path." Clearly, the first direction of conveyance created by the mandrels 84 when in "a depending position" (as required by the claim) and the second direction of conveyance of the fingers 302 of the takeaway conveyor 56 when in "an upstanding position" (as the claim further requires) are not perpendicular, but rather are **parallel**. In other words, the

corresponding first and second directions in Charron are aligned, which is precisely the opposite of what claim 1 expressly requires. Furthermore, the mandrel 84 is not pivotally mounted, as required by claim 2, a requirement that appears to have been ignored in making the rejection. Accordingly, the reference does not disclose the “exact same invention” of claims 1 and 2, and the anticipation rejections should be withdrawn.

In rejecting claims 3-4, the Examiner admits that “the takeaway conveyor of Ganz is not directly disclosed as a pair of chains with lugs, however, it is **likely that the invention was meant to include such a configuration**. . . .” (Office Action, p. 4, ¶ 8) (emphasis added). Respectfully, a rejection based on an unverified statement regarding what an individual Examiner thinks a reference is “likely meant to include” cannot possibly be sustained under the “substantial evidence” standard of the Administrative Procedures Act. *In re Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (Fed. Cir. 2001) (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test). If the Examiner persists in this ground of rejection, Applicant respectfully requests an Affidavit under 37 CFR 1.104(d)(2) providing an explanation of why Ganz must necessarily disclose this feature of the claimed invention.

The Examiner further contends that it would have been an “obvious design choice” to “include two chain conveyors with lugs (configured as the overhead conveyor).” However, such a rejection cannot be sustained where the claimed structure and the function it performs (namely, squaring the cartons being conveyed) is different from the prior art. *See In re Gal*, 980 F.2d 717 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992) (finding of “obvious design choice” precluded where the claimed structure and the function it performs are different from the prior art).

The Examiner further cites U.S. Patent Nos. 4,590,745 to Randles and 2,970,526 to Gobalet to contend that the inventions of claims 1-6 and 9 would be “obvious.” Randles discloses a carton closing machine with bottom-running, fixed lug conveyors 18, 23. No

overhead conveyor with lugs selectively movable to a depending position for engaging and conveying a carton is disclosed in Randles. The catches 54 of Gobalet cannot qualify as the claimed lugs of the takeaway conveyor, since these catches remain fixed in place and thus are not “conveyed” by any conveyor. Moreover, Gobalet simply discloses two in-line lug conveyors, and does not even remotely contemplate conveying cartons in first and second orthogonal directions in substantially the same horizontal plane. Accordingly, neither reference teaches or even remotely suggests overhead and takeaway conveyors as claimed with orthogonal conveying directions.

As for the combination of Gobalet and Randles, the Examiner states that:

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the overhead conveyor in the invention of Randles for forwarding the boxes along the path.

No “reason” whatsoever is provided for combining the features of these references, which both disclose devices already capable of “forwarding boxes” along a path. Accordingly, a *prima facie* case of obviousness is lacking for this additional reason. See *KSR Int’l Co. v. Teleflex, Inc.*, 82 USPQ2D 1385 (U.S. 2007) (holding that under 35 U.S.C. 103(a), it was “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine . . . elements” and that “**a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art . . .**”) (emphasis added).

Rather than leading a skilled artisan to the claimed inventions, Randles and Gobalet actually teach away from them. Applicant’s claimed carton conveyor advantageously allows for the carton to be conveyed with an overhead lug selectively moved into a position for engaging the carton. This avoids the troublesome “fixed lug” approach of Randles, Gobalet, and others. During high speed operation, fixed lugs have an undesirable tendency to deform the flaps, which may be completely avoided by Applicant’s claimed invention.

Furthermore, Applicant couples the advantages of the overhead conveyor having a depending lug with an orthogonal takeaway conveyor having upstanding lugs. This

advantageously provides a much smaller footprint while maintaining the desirable high throughput, and without the need for uncontrolled transfer of the carton between two bottom-running, orthogonal conveyors (which, by their very nature, cannot overlap). Neither Gobalet nor Randles even remotely suggest this combination of features, or otherwise provide the concomitant advantages afforded by Applicant's claimed inventions. Instead, Gobalet merely discloses a single lug conveyor, and Randles teaches two bottom-running lug conveyors. These references thus not only represent the *status quo*, but would also actually tend to lead a skilled artisan in a divergent direction from the path taken by the present Applicant. *See, e.g. In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130 (Fed. Cir. 1994) ("A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be . . . led in a direction divergent from the path that was taken by the applicant."). Accordingly, the cited references are considered inapposite in the obviousness calculus.

Applicant also presents new claims 107-112 for consideration. Claim 107 reads on an apparatus for conveying a carton including a lid having at least one flap comprising a conveyor assembly creating a conveying path having an L-shape in plan view. The conveyor assembly includes an overhead conveyor overlying a first leg of the L-shaped conveying path and having at least one first lug mounted to a first endless chain for selectively pivoting relative to the first endless chain from a retracted position to a depending position for engaging and conveying the carton along the first leg of the L-shaped path. A takeaway conveyor is also provided for conveying at least one second lug mounted to a second endless chain for selectively pivoting relative to the second endless chain from a retracted position to an upstanding position for engaging and conveying the carton in a second leg of the path generally perpendicular to the first leg of the L-shaped path. A folder folds the at least one flap while the carton is conveyed along the path. Claim 108 depends from claim 107, and further requires that the overhead conveyor at least partially overlies the second leg of the L-shaped conveying path.

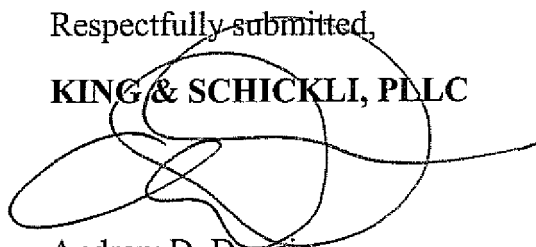
New claims 109-112 also require an arrangement of means for conveying, including means for conveying the carton along a first leg of an L-shaped conveying path and means for conveying the carton along a second leg of the L-shaped path. According to claim 109, the means for conveying along the first leg of the L-shaped path at least partially overlies the second leg of the L-shaped path. Claims 110-112 clearly link or associate certain disclosed structures with the corresponding “means plus function” elements of claim 109.

None of the prior art cited by the Examiner disclose an arrangement of conveyors in a conveyor assembly required by claim 107, or the means for conveying required by claim 109. Accordingly, it is believed that these new claims should be held allowable.

Summarizing, Applicant respectfully submits that all claims presented patentably distinguish over the cited references. Accordingly, a Notice of Allowance is in order. If any other issues remain, the Examiner is invited to call the undersigned representative, and is authorized to debit any fees due from Deposit Account 11-0978.

Respectfully submitted,

KING & SCHICKLI, PLLC

A handwritten signature in black ink, appearing to read 'Andrew D. Dorisio', is written over the firm name 'KING & SCHICKLI, PLLC'.

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